

Attorney Docket No.: DC-0187
Inventors: Cheung, Ambrose
Serial No.: 10/092,264
Filing Date: March 6, 2002
Page 4

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A An isolated nucleic acid sequence encoding a polypeptide which regulates expression of polypeptides involved in autolytic processes in bacteria, wherein the nucleic acid hybridizes under stringent conditions to a nucleic acid comprising the nucleic acid sequence of SEQ ID NO:1 or SEQ ID NO:3.

Claim 2 (currently amended): The nucleic acid ~~sequence~~ of claim 1 wherein the bacteria is *Staphylococcus aureus*.

Claim 3 (previously presented): The nucleic acid of claim 1 wherein the bacteria comprises *Staphylococcus*, *Sinorhizobium*, *Listeria*, *Clostridium*, *Bacillus*, *Corynebacterium*, *Brucella*, *Pseudomonas*, *Shewanella*, *Mesorhizobium*, *Caulobacter*, *Lactococcus*, *Mycobacterium*, *Burkholderia*, *Geobacter*, *Treponema*, *Vibrio*, *Escherichia*, *Enterococcus*, *Salmonella*, *Klebsiella*, *Bordetella*, *Actinobacillus*, *Streptomyces*, *Streptococcus*, or *Acinetobacter*.

Claim 4 (currently amended): A An isolated nucleic acid sequence comprising the nucleic acid sequence of SEQ ID NO:1 or SEQ ID NO:3.

Claims 5-7 (canceled).

Claim 8 (currently amended): A composition comprising a selected transposon and the nucleic acid ~~sequence~~ of claim 1.

Attorney Docket No.: DC-0187
Inventors: Cheung, Ambrose
Serial No.: 10/092,264
Filing Date: March 6, 2002
Page 5

Claim 9 (currently amended): A vector comprising the nucleic acid ~~sequence~~ of claim 1.

Claim 10 (original): A host cell comprising the vector of claim 9.

Claims 11-12 (canceled).

Claim 13 (currently amended): A method for identifying agents which inhibit growth and ~~infectivity~~ increase lysis of bacteria comprising identifying agents which inhibit expression of a nucleic acid ~~sequence~~ of claim 1 ~~or activity of a polypeptide encoded thereby~~.

Claim 14 (original): The method of claim 13 wherein the bacteria is *Staphylococcus aureus*.

Claim 15 (previously presented): The method of claim 13 wherein the bacteria comprises *Staphylococcus*, *Sinorhizobium*, *Listeria*, *Clostridium*, *Bacillus*, *Corynebacterium*, *Brucella*, *Pseudomonas*, *Shewanella*, *Mesorhizobium*, *Caulobacter*, *Lactococcus*, *Mycobacterium*, *Burkholderia*, *Geobacter*, *Treponema*, *Vibrio*, *Escherichia*, *Enterococcus*, *Salmonella*, *Klebsiella*, *Bordetella*, *Actinobacillus*, *Streptomyces*, *Streptococcus*, or *Acinetobacter*.

Claim 16 (currently amended): A method of inhibiting growth and ~~infectivity~~ increasing lysis of bacteria comprising contacting the bacteria with an agent which inhibits the expression of a nucleic acid ~~sequence~~ of claim 1 ~~or the activity of a polypeptide encoded thereby~~.

Attorney Docket No.: DC-0187
Inventors: Cheung, Ambrose
Serial No.: 10/092,264
Filing Date: March 6, 2002
Page 6

Claim 17 (original): The method of claim 16 wherein the bacteria is *Staphylococcus aureus*.

Claim 18 (previously presented): The method of claim 16 where the bacteria comprises *Staphylococcus*, *Sinorhizobium*, *Listeria*, *Clostridium*, *Bacillus*, *Corynebacterium*, *Brucella*, *Pseudomonas*, *Shewanella*, *Mesorhizobium*, *Caulobacter*, *Lactococcus*, *Mycobacterium*, *Burkholderia*, *Geobacter*, *Treponema*, *Vibrio*, *Escherichia*, *Enterococcus*, *Salmonella*, *Klebsiella*, *Bordetella*, *Actinobacillus*, *Streptomyces*, *Streptococcus*, or *Acinetobacter*.

Claim 19 (currently amended): A pharmaceutical composition for use as an anti-bacterial agent comprising a pharmaceutically acceptable vehicle and ~~either an agent which inhibits the expression of a nucleic acid sequence of claim 1 or an agent which inhibits the activity of a polypeptide encoded thereby.~~

Claim 20 (original): The pharmaceutical composition of claim 19 wherein the bacteria is *Staphylococcus aureus*.

Claim 21 (previously presented): The pharmaceutical composition of claim 19 wherein the bacteria comprises *Staphylococcus*, *Sinorhizobium*, *Listeria*, *Clostridium*, *Bacillus*, *Corynebacterium*, *Brucella*, *Pseudomonas*, *Shewanella*, *Mesorhizobium*, *Caulobacter*, *Lactococcus*, *Mycobacterium*, *Burkholderia*, *Geobacter*, *Treponema*, *Vibrio*, *Escherichia*, *Enterococcus*, *Salmonella*, *Klebsiella*, *Bordetella*, *Actinobacillus*, *Streptomyces*, *Streptococcus*, or *Acinetobacter*.

Claim 22 (canceled).

Attorney Docket No.: DC-0187
Inventors: Cheung, Ambrose
Serial No.: 10/092,264
Filing Date: March 6, 2002
Page 7

Claim 23 (currently amended): A kit for identifying the presence of the RAT gene comprising ~~a means for analyzing a biological sample for the presence of the RAT gene~~ an agent that interacts with a RAT gene of SEQ ID NO:1.

Claim 24 (canceled).

Claim 25 (currently amended): A kit for identifying the presence of the RAT mutant gene comprising ~~a means for analyzing a biological sample for the presence of the RAT mutant gene~~ an agent that interacts with a RAT mutant gene of SEQ ID NO:3.